

WHAT IS CLAIMED IS:

1. A toothed transmission belt, comprising a metal core coated with elastomer material, wherein said metal
5 core comprises at least two mutually parallel and spaced apart metal strips, substantially coplanar to each other, arranged in the longitudinal direction of the belt, and a plurality of metal cross-members, distributed according to a constant pitch in the
10 longitudinal direction of the belt, which rigidly connect the two metal strips to each other and each whereof constitutes the core of a respective tooth of the toothed belt.

2. A toothed transmission belt as claimed in claim
15 1, wherein each cross-member of the aforesaid metal core, and consequently each tooth of the toothed transmission belt has a trapeze-shaped cross section.

3. A toothed transmission belt as claimed in claim
20 2, wherein each cross member of the metal core is constituted by a solid section metal bar.

4. A toothed transmission belt as claimed in claim
1, wherein each cross member is constituted by a hollow section bar obtained by a bending operation, starting from a metal sheet.

25 5. A toothed transmission belt as claimed in claim 3, wherein the metal sheet constituting each cross member has slots traversed by the aforesaid metal strips.

6. A toothed transmission belt as claimed in claim
30 1, wherein the cross members are welded to the two metal strips.

7. A toothed transmission belt as claimed in claim
2, wherein each cross member of the metal core and consequently each tooth of the toothed transmission
35 belt has a trapeze-shaped cross-section also in a plane

that is orthogonal to the longitudinal direction of the belt, with the end surface of each tooth positioned in mutually converging inclined planes.

5 8. A toothed transmission belt as claimed in claim 1, wherein the toothed surface of the belt has a layer of adhesion-proof coating over the rubber coating.

9. Belt transmission device comprising a toothed transmission belt as claimed in any of the previous claims and a gear wheel meshing with said toothed belt,
10 wherein said wheel has a plurality of peripheral teeth alternating with cavities and two end flanges which constitute the ends of the cavities.

10. A belt transmission device as claimed in claim 9, wherein said end flanges of the gear wheel have a
15 circumferential distribution of windows corresponding to the ends of the cavities between the teeth of the gear wheel, to prevent a contact between the inner surfaces of said flanges and the end surfaces of the teeth of the toothed transmission belt.

20 11. A method for manufacturing a toothed belt according to claim 1, wherein the two parallel and spaced apart metal strips are caused to advance continuously by unrolling them from two feeding reels, said metal cross-members are connected in sequence to
25 the metal strips while the strips are proceeding forward, by feeding the cross-members from a cross-member supplier, and the metal core obtained thereby is coated with a layer of elastomer material while said core is advancing.

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